

# WEST Search History

DATE: Monday, July 07, 2003

**Set Name Query**

side by side

**Hit Count Set Name**

result set

*DB=USPT; PLUR=YES; OP=OR*

L8	PSPS or l6	1031	L8
L7	l5 and L6	0	L7
L6	proximity adj service adj provider adj system\$1	1	L6
L5	l2 and L4	2	L5
L4	video and remote and (operating adj system) and display and accessor\$3	441	L4
L3	l1 and L2	0	L3
L2	split adj personal adj computer\$1	2	L2
L1	((709/310  709/311  709/312  709/313  709/314  709/315  709/316  709/317  709/318  709/319  709/320 )!.CCLS. )	1480	L1

END OF SEARCH HISTORY

**WEST****End of Result Set**☐ **Generate Collection** **Print**

L2: Entry 2 of 2

File: USPT

Jun 5, 2001

US-PAT-NO: 6243743

DOCUMENT-IDENTIFIER: US 6243743 B1

TITLE: Split personal computer system

DATE-ISSUED: June 5, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Freeny; Charles C.	Dallas	TX		

US-CL-CURRENT: 709/217; 709/204, 709/250

## CLAIMS:

What is claimed is:

1. A split personal computer system for selectively processing video portions, input/output portions, computational portions and storage portions of personal computer tasks, comprising:

a remote portion adapted to selectively perform the computational portions and the storage portions of the personal computer tasks; ~~\_\_\_\_\_~~

a local portion adapted to selectively perform the video portions and the input/output portions of the personal computer tasks, the local portion comprising:

a display unit located remotely from the remote portion of the split personal computer system;

an accessory unit in communication with the display unit;

an input unit in communication with the accessory unit to input data signals into the accessory unit;

communication means for interfacing the accessory unit with the remote portion of the split personal computer system for permitting data signals received by the accessory unit from the input unit to be transmittable from the accessory unit to the remote portion of the split personal computer system, the data signals being processable by the remote portion of the split personal computer system to generate output signals, the output signals including video signals and being transmittable from the remote portion of the split personal computer system to the accessory unit, and transmittable from the accessory unit to the display unit.

2. A system as defined in claim 1, wherein the accessory unit of the local portion of the split personal computer system is disposed in a portable housing.

3. A system as defined in claim 1, wherein the accessory unit of the local portion of the split personal computer system comprises:

a local computer;

an interface in communication with the local computer; and

a signal separator interface means in communication with the local computer and the interface for receiving at least two types of signals and for selectively transmitting

the signals to one of the local computer and the interface based on an identifier included in the signals.

4. A system as defined in claim 1 wherein the communication means includes:

a first communication link means for transmitting data in between the accessory unit and the remote portion of the split personal computer system; and

a second communication link means for selectively transmitting video signals from the remote portion of the split personal computer system to the accessory unit.

5. A system as defined in claim 4, wherein the first communication link means are telephone communication links, and the second communication link means are television communication links.

6. A system as defined in claim 1, wherein the accessory unit of the local portion of the split personal computer system is included in a cable television interface box which is selectively connectable to a cable television connection.

7. A system as defined in claim 1, wherein the remote portion of the split personal computer system includes:

a plurality of remote computer units; and

a remote system controller means for networking and controlling the remote computer units, the remote system controller means including means for receiving a remote logon command from the accessory unit and for checking the validity of the remote logon command, the remote system controller means allowing connection to at least one of the remote computer units if the remote logon command is valid and prohibiting connection if the particular remote logon command is not valid.

8. A system as defined in claim 7, wherein the remote system controller is programmed with a billing program which counts the time periods in which the accessory unit is connected to at least one of the remote computer units.

9. A split personal computer system, for selectively executing personal computer tasks comprising:

a remote portion of the split personal computer system adapted to perform the computational and storage portions of the personal computer tasks;

a plurality of local portions disposed remotely from the remote portion of the split personal computer system, each local portion of the split personal computer system being adapted to solely perform the video and input/output portions of the personal computer tasks and including:

a television display unit;

a television accessory unit in communication with the television display unit; and

an input unit in communication with the television accessory unit to input data signals into the television accessory unit; and

communication means for interfacing the television accessory unit of each of the local portions of the split personal computer system with the remote portion of the split personal computer system for permitting data signals received by the television accessory units from the respective input units to be transmittable from the television accessory units to the remote portion of the split personal computer system, the data signals being processable by the remote portion of the split personal computer system to generate output signals, the output signals including video signals and being transmittable from the remote portion of the split personal computer system to respective television accessory units, and transmittable from the television accessory units to respective television display units as television signals.

10. A system as defined in claim 9, wherein at least one television accessory unit of the local portions of the split personal computer system is disposed in a portable housing.

11. A system as defined in claim 9, wherein the television accessory units of the local portion of the split personal computer system comprise:

a local computer;

a television interface in communication with the local computer; and

a signal separator interface means in communication with the local computer and the television interface for receiving at least two types of television signals and for selectively transmitting the television signals to one of the local computer and the television interface based on an identifier included in the television signals.

12. A system as defined in claim 9 wherein the communication means includes:

a first communication link means for transmitting data in between the television accessory units and the remote portion of the split personal computer system; and

a second communication link means for selectively transmitting video signals from the remote portion of the split personal computer system to the television accessory units.

13. A system as defined in claim 12, wherein the first communication link means are telephone communication links, and the second communication link means are television communication links.

14. A system as defined in claim 9, wherein the television accessory units of the local portion of the split personal computer system are cable television interface boxes which are selectively connectable to respective cable television connections.

15. A system as defined in claim 9, wherein the remote portion of the split personal computer system includes:

a plurality of remote computer units; and

a remote system controller means for networking and controlling the remote computer units, the remote system controller means including means for receiving a remote logon command from the television accessory unit and for checking the validity of the remote logon command, the remote system controller means allowing connection to at least one of the remote computer units if the remote logon command is valid and prohibiting connection if the particular remote logon command is not valid.

16. A system as defined in claim 15, wherein the remote system controller is programmed with a billing program which counts the time periods in which the television accessory units are connected to respective remote computer units.

17. A method for utilizing a personal computer, comprising the steps of:

inputting respective data signals into a plurality of television accessory units;

outputting, by the television accessory units, the respective data signals to a remote portion of the split personal computer system, the remote portion of the split personal computer system being disposed remotely from the television accessory units;

receiving, by the remote portion of the split personal computer system, the respective data signals;

processing, by the remote portion of the split personal computer system, the respective data signals with at least one application program to generate output signals;

outputting, by the remote portion of the split personal computer system, the output signals to the respective television accessory units;

receiving, by the television accessory units, the output signal produced by the remote portion of the split personal computer system from the data signals input to that respective television accessory unit;

outputting, by each television accessory unit, the respective output signals received from the remote portion of the split personal computer system to a television display unit as television signals;

receiving, by each television display unit, the television signals output by the respective television accessory units; and

outputting, by each television display unit, the television signals in a format  
perceivable by at least one individual located near the television display unit.

WEST



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L2: Entry 1 of 2

File: USPT

Mar 19, 2002

US-PAT-NO: 6360253

DOCUMENT-IDENTIFIER: US 6360253 B1

TITLE: Split personal computer system

DATE-ISSUED: March 19, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Freeny; Charles C.	Dallas	TX		

US-CL-CURRENT: 709/217; 709/203

## CLAIMS:

What is claimed is:

1. A split personal computer system for selectively processing video portions, input/output portions, computational portions and storage portions of personal computer tasks, comprising:

a remote portion adapted to selectively perform the computational portions and the storage portions of the personal computer tasks;

a local portion remotely located with respect to the remote portion and adapted to selectively perform the video portions and the input/output portions of the personal computer tasks, the local portion comprising:

a display unit located remotely from the remote portion of the split personal computer system;

an accessory unit in communication with the display unit, the accessory unit outputting video signals to the display unit so as to perform video and output portions of the personal computer tasks;

an output unit receiving data signals from the accessory unit to provide an output signal;

an input unit in communication with the accessory unit to input data signals into the accessory unit for performing input portions of the personal computer tasks;

communication means for interfacing the accessory unit with the remote portion of the split personal computer system for permitting data signals received by the accessory unit from the input unit to be transmittable from the accessory unit to the remote portion of the split personal computer system, the data signals being processable by the remote portion of the split personal computer system to generate output signals, the output signals including video signals and being transmittable from the remote portion of the split personal computer system to the accessory unit, and transmittable from the accessory unit to the display unit.

2. A system as defined in claim 1, wherein the accessory unit of the local portion of the split personal computer system is disposed in a portable housing.

3. A system as defined in claim 1, wherein the accessory unit of the local portion of the split personal computer system comprises:

a local computer;

an interface in communication with the local computer; and

a signal separator interface means in communication with the local computer and the interface for receiving at least two types of signals and for selectively transmitting the signals to one of the local computer and the interface based on an identifier included in the signals.

4. A system as defined in claim 1 wherein the communication means includes:

a first communication link means for transmitting data in between the accessory unit and the remote portion of the split personal computer system; and

a second communication link means for selectively transmitting video signals from the remote portion of the split personal computer system to the accessory unit.

5. A system as defined in claim 4, wherein the first communication link means are telephone communication links, and the second communication link means are television communication links.

6. A system as defined in claim 1, wherein the accessory unit of the local portion of the split personal computer system is included in a cable television interface box which is selectively connectable to a cable television connection.

7. A split personal computer system for selectively executing personal computer tasks, comprising:

a remote portion of the split personal computer system adapted to selectively perform the computational and storage portions of the personal computer tasks;

a plurality of local portions disposed remotely from the remote portion of the split personal computer system, each local portion of the split personal computer system being adapted to solely perform the video and input/output portions of the personal computer tasks and including:

a television display unit;

a television accessory unit in communication with the television display unit, the television accessory unit outputting video signals to the television display unit so as to perform video and output portions of the personal computer tasks;

an output unit receiving data signals from the television accessory unit to provide an output signal;

an input unit in communication with the accessory unit to input data signals into the accessory unit for performing input portions of the personal computer tasks;

communication means for interfacing the television accessory unit of each of the local portions of the split personal computer system with the remote portion of the split personal computer system for permitting data signals received by the television accessory units from the respective input units to be transmittable from the television accessory units to the remote portion of the split personal computer system, the data signals being processable by the remote portion of the split personal computer system to generate output signals, the output signals including video signals and being transmittable from the remote portion of the split personal computer system to respective television accessory units, and transmittable from the television accessory units to respective display units as television signals.

8. A system as defined in claim 7, wherein at least one television accessory unit of the local portions of the split personal computer system is disposed in a portable housing.

9. A system as defined in claim 7, wherein the television accessory units of the local portion of the split personal computer system comprise:

a local computer;

a television interface in communication with the local computer; and

a signal separator interface means in communication with the local computer and the television interface for receiving at least two types of television signals and for

selectively transmitting the television signals to one of the local computer and the television interface based on an identifier included in the television signals.

10. A system as defined in claim 7 wherein the communication means includes:

a first communication link means for transmitting data in between the television accessory units and the remote portion of the split personal computer system; and

a second communication link means for selectively transmitting video signals from the remote portion of the split personal computer system to the television accessory units.

11. A system as defined in claim 10, wherein the first communication link means are telephone communication links, and the second communication link means are television communication links.

12. A system as defined in claim 7, wherein the television accessory units of the local portion of the split personal computer system are cable television interface boxes which are selectively connectable to respective cable television connections.

13. A system as defined in claim 7, wherein the remote portion of the split personal computer system includes:

a plurality of remote computer units; and

a remote system controller means for networking and controlling the remote computer units, the remote system controller means including means for receiving a remote logon command from the television accessory unit and for checking the validity of the remote logon command, the remote system controller means allowing connection to at least one of the remote computer units if the remote logon command is valid and prohibiting connection if the particular remote logon command is not valid.

14. A system as defined in claim 13, wherein the remote system controller is programmed with a billing program which counts the time periods in which the television accessory units are connected to respective remote computer units.

15. A split personal computer system for selectively processing video portions, input/output portions, computational portions and storage portions of personal computer tasks, comprising:

a remote portion comprising:

a remote system controller established on the World Wide Web;

a plurality of remote computer units selectively performing the computational portions and the storage portions of the personal computer tasks, each of the remote computer units being associated with a unique individual and having application programs and data associated with previous usage by the individual stored thereon;

a plurality of local portions located remotely from the remote computer units and adapted to selectively perform the video portions and the input/output portions of the personal computer tasks, each of the local portions being associated with an individual such that each individual is associated with one of the local portions and one of the remote computer units, each of the local portions comprising:

a television display unit adapted to receive television signals and output the television signals in a format perceivable by at least one individual located near the television display unit;

a television accessory unit in communication with the television display unit, the television accessory unit outputting television signals to the television display unit so as to perform video and output portions of the personal computer tasks;

an input unit in communication with the accessory unit to input data signals into the accessory unit for performing input portions of the personal computer tasks; and

wherein the remote system controller communicates with the local portions via the Internet, and interfaces each individual's local portion with the individual's remote computer unit of the split personal computer system for permitting data signals received by each individual's local portion to be transmittable from each individual's local portion to the individual's remote computer unit of the split personal computer system,



the data signals being processable by the individual's remote computer unit of the split personal computer system to generate output signals, the output signals including video signals and being transmittable from the individual's remote computer unit of the split personal computer system to the individual's local portion.

16. A remote portion of a split personal computer system for selectively processing video portions, input/output portions, computational portions and storage portions of personal computer tasks wherein the split personal computer has a plurality of remote computer units selectively performing the computational portions and the storage portions of the personal computer tasks, each of the remote computer units being associated with a unique individual and having application programs and data associated with previous usage by the individual stored thereon, and a plurality of local portions located remotely from the remote computer units and adapted to selectively perform the video portions and the input/output portions of the personal computer tasks, each of the local portions being associated with an individual such that each individual is associated with one of the local portions and one of the remote computer units, the remote portion comprising:

a remote system controller established on the World Wide Web and communicating with the local portions via the Internet, and interfacing each individual's local portion with the individual's remote computer unit of the split personal computer system for permitting data signals received by each individual's local portion to be transmittable from each individual's local portion to the individual's remote computer unit of the split personal computer system, the data signals being processable by the individual's remote portion of the split personal computer system to generate output signals, the output signals including video signals and being transmittable from the individual's remote computer unit of the split personal computer system to the individual's local portion.

17. A split personal computer system for selectively processing video portions, input/output portions, computational portions and storage portions of personal computer tasks, comprising:

a remote portion adapted to selectively perform the computational portions and the storage portions of the personal computer tasks, the remote portion comprising;

a plurality of remote computer units; and

a remote system controller means for networking and controlling the remote computer units, the remote system controller means including means for receiving a remote logon command from the accessory unit and for checking the validity of the remote logon command, the remote system controller means allowing connection to at least one of the remote computer units if the remote logon command is valid and prohibiting connection if the particular remote logon command is not valid;

a local portion remotely located with respect to the remote portion and adapted to selectively perform the video portions and the input/output portions of the personal computer tasks, the local portion comprising:

a display unit located remotely from the remote portion of the split personal computer system;

an accessory unit in communication with the display unit, the accessory unit outputting video signals to the display unit so as to perform video and output portions of the personal computer tasks;

an input unit in communication with the accessory unit to input data signals into the accessory unit for performing input portions of the personal computer tasks;

communication means for interfacing the accessory unit with the remote portion of the split personal computer system for permitting data signals received by the accessory unit from the input unit to be transmittable from the accessory unit to the remote portion of the split personal computer system, the data signals being processable by the remote portion of the split personal computer system to generate output signals, the output signals including video signals and being transmittable from the remote portion of the split personal computer system to the accessory unit, and transmittable from the accessory unit to the display unit.

18. A system as defined in claim 17, wherein the remote system controller is programmed with a billing program which counts the time periods in which the accessory unit is

connected to at least one of the remote computer units.

**WEST****End of Result Set**☐ **Generate Collection** **Print**

L2: Entry 2 of 2

File: USPT

Jun 5, 2001

US-PAT-NO: 6243743

DOCUMENT-IDENTIFIER: US 6243743 B1

TITLE: Split personal computer system

DATE-ISSUED: June 5, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Freeny; Charles C.	Dallas	TX		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Automated Business Companies	Irving	TX			02

APPL-NO: 09/ 014859 [PALM]

DATE FILED: January 29, 1998

INT-CL: [07] G06 F 15/16

US-CL-ISSUED: 709/217; 709/204, 709/250

US-CL-CURRENT: 709/217; 709/204, 709/250

FIELD-OF-SEARCH: 709/204, 709/217, 709/250

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

**Search Selected****Search ALL**

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>5805806</u>	September 1998	McArthur	709/250
<input type="checkbox"/>	<u>5832223</u>	November 1998	Hara et al.	709/217
<input type="checkbox"/>	<u>5835717</u>	November 1998	Karlton et al.	709/217
<input type="checkbox"/>	<u>5850265</u>	December 1998	Suh	348/553
<input type="checkbox"/>	<u>5857142</u>	January 1999	Lin et al.	455/51

ART-UNIT: 214

PRIMARY-EXAMINER: Maung; Zarni

ASSISTANT-EXAMINER: Najjar; Saleh

ATTY-AGENT-FIRM: Dunlap, Coddling &amp; Rogers, P.C.

ABSTRACT:

The present invention is a system which allows a personal computer system to be split into a local portion and a remote portion. The local portion of the split personal computer system is located in conjunction with the TV system located at homes or hotels. The remote portion of the split personal computer system is located in a remote location and normally maintained by a network service provider. The local portion includes a television display unit, and a television accessory unit in communication with the television display unit. An input unit is located adjacent the television display unit and is in communication with the television accessory unit to input data signals into the television accessory unit. Finally, communication means are provided for interfacing the television accessory unit of the local portion to the remote portion for permitting data signals received by the television accessory unit from the input unit to be transmittable from the television accessory unit to the remote portion of the split personal computer system. The data signals are processable by the remote portion to generate output signals. The output signals include video signals and are transmittable from the remote portion to the television accessory unit. The television accessory unit receives the output signals and transmits same to the television display unit as television signals. The system operates in such a manner that the user of the split personal computer system would not realize that the computer was split into two physical portions.

17 Claims, 4 Drawing figures

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L2: Entry 1 of 2

File: USPT

Mar 19, 2002

US-PAT-NO: 6360253

DOCUMENT-IDENTIFIER: US 6360253 B1

TITLE: Split personal computer system

DATE-ISSUED: March 19, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Freeny; Charles C.	Dallas	TX		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Automated Business Companies	Dallas	TX			02

APPL-NO: 09/ 443125 [PALM]

DATE FILED: November 18, 1999

## PARENT-CASE:

CROSS REFERENCE TO RELATED APPLICATIONS This application is a continuation of U.S. Ser. No. 09/014,859, entitled SPLIT PERSONAL COMPUTER SYSTEM (now U.S. Pat. No. 6,243,743), filed on Jan. 29, 1998, the entire content of which is hereby expressly incorporated herein by reference.

INT-CL: [07] G06 F 15/16

US-CL-ISSUED: 709/217; 709/203

US-CL-CURRENT: 709/217; 709/203

FIELD-OF-SEARCH: 709/203, 709/217, 348/460, 348/723, 348/8, 348/13, 345/161, 345/327, 345/6, 345/10, 345/158, 345/156

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

Search Selected

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	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>5771354</u>	June 1998	Crawford	395/200.59
<input type="checkbox"/>	<u>5812930</u>	September 1998	Zavrel	455/5.1
<input type="checkbox"/>	<u>5852437</u>	December 1998	Wugofski et al.	345/327
<input type="checkbox"/>	<u>5940074</u>	August 1999	Britt, Jr. et al.	345/333
<input type="checkbox"/>	<u>5940387</u>	August 1999	Humpleman	370/352
<input type="checkbox"/>	<u>5982363</u>	November 1999	Naiff	345/327
<input type="checkbox"/>	<u>6181326</u>	January 2001	Takahashi	345/158
<input type="checkbox"/>	<u>6243743</u>	June 2001	Freeny	709/217

## OTHER PUBLICATIONS

"Good-Bye, GUI-HELLO NUI", Byte, Jul. 1997; pp. 60-72.

"Part I-Cheaper Computing"; Byte, Apr. 1997, pp. 66-80.

"IBM Technical Disclosure Bulliten", 700 IBM Technical Disclosure Bulletin; vol. 30, No. 12, May 1988, Armonk, NY USA; pp. 30-33.

ART-UNIT: 2154

PRIMARY-EXAMINER: Najjar; Saleh

ATTY-AGENT-FIRM: Dunlap, Coddling & Rogers, P.C.

## ABSTRACT:

The present invention is a system which allows a personal computer system to be split into a local portion and a remote portion. The local portion of the split personal computer system is located in conjunction with the TV system located at homes or hotels. The remote portion of the split personal computer system is located in a remote location and normally maintained by a network service provider. The local portion includes a television display unit, and a television accessory unit in communication with the television display unit. An input unit is located adjacent the television display unit and is in communication with the television accessory unit to input data signals into the television accessory unit. Finally, communication means are provided for interfacing the television accessory unit of the local portion to the remote portion for permitting data signals received by the television accessory unit from the input unit to be transmittable from the television accessory unit to the remote portion of the split personal computer system. The data signals are processable by the remote portion to generate output signals. The output signals include video signals and are transmittable from the remote portion to the television accessory unit. The television accessory unit receives the output signals and transmits same to the television display unit as television signals. The system operates in such a manner that the user of the split personal computer system would not realize that the computer was split into two physical portions.

18 Claims, 4 Drawing figures

**WEST**[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 2 of 2 returned.**☐ 1. Document ID: US 6360253 B1

L2: Entry 1 of 2

File: USPT

Mar 19, 2002

US-PAT-NO: 6360253

DOCUMENT-IDENTIFIER: US 6360253 B1

TITLE: Split personal computer system

CCLS: 709/217, 709/203

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw Desc	Image
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☐ 2. Document ID: US 6243743 B1

L2: Entry 2 of 2

File: USPT

Jun 5, 2001

US-PAT-NO: 6243743

DOCUMENT-IDENTIFIER: US 6243743 B1

TITLE: Split personal computer system

CCLS: 709/217, 709/204, 709/250

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw Desc	Image
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Terms	Documents
split adj personal adj computer\$1	2

**Display Format:** [TI, CC](#) [Change Format](#)[Previous Page](#)[Next Page](#)

**WEST****End of Result Set**☐

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L6: Entry 1 of 1

File: USPT

Dec 3, 2002

US-PAT-NO: 6490443

DOCUMENT-IDENTIFIER: US 6490443 B1

TITLE: Communication and proximity authorization systems

DATE-ISSUED: December 3, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Freeny, Jr.; Charles C.	Dallas	TX		

## ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Automated Business Companies	Irving	TX			02

APPL-NO: 09/ 652077 [PALM]

DATE FILED: August 31, 2000

## PARENT-CASE:

CROSS REFERENCE TO RELATED APPLICATIONS This application claims priority to the provisional patent application identified by U.S. Ser. No. 60/152,184, entitled "New Communication and Proximity Authorization Systems", which was filed on Sep. 2, 1999.

INT-CL: [07] H04 B 1/38, H04 M 1/00

US-CL-ISSUED: 455/406; 455/550, 705/13, 705/26, 705/418

US-CL-CURRENT: 455/406; 455/426.1, 455/426.2, 455/550.1, 705/13, 705/26, 705/418

FIELD-OF-SEARCH: 380/247, 380/258, 340/5.83, 340/5.9, 340/5.91, 340/5.8, 340/5.4, 340/5.41, 194/900, 194/901, 194/902, 379/143, 379/144, 455/90, 455/406, 455/550, 705/64-79, 705/16-18, 705/26, 705/418, 705/13

## PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

Search Selected

Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	4777646	October 1988	Harris	379/91
<input type="checkbox"/>	4965821	October 1990	Bishop et al.	455/409
<input type="checkbox"/>	4993068	February 1991	Piosenka et al.	380/23
<input type="checkbox"/>	RE33743	November 1991	Blaese	343/715
<input type="checkbox"/>	5144649	September 1992	Zicker et al.	379/59
<input type="checkbox"/>	5159625	October 1992	Zicker	379/59
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<input type="checkbox"/>	5189632	February 1993	Paaajanen et al.	364/705.05



<input type="checkbox"/>	<u>5201067</u>	April 1993	Grube et al.	455/89
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<input type="checkbox"/>	<u>5278536</u>	January 1994	Furtaw et al.	340/310A
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## ABSTRACT:

A proximity service unit for providing at least one predetermined service for use with multiple types of wireless devices. The proximity service unit includes a multiple channel wireless transceiver, a proximity unit validation assembly, and a legacy activation unit. The multiple channel wireless transceiver receives at least two signal types, such as infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals. The multiple channel wireless transceiver receives a request authorization code from each of a plurality of respective wireless devices such that the plurality of wireless devices communicate simultaneously with the multiple channel wireless transceiver without air time. The proximity unit validation assembly communicates with the multiple channel wireless transceiver and receives and validates the plurality of request authorization codes received by the multiple channel wireless transceiver. The legacy activation unit receives a service authorization code and provides at least one predetermined service for each wireless device providing the request authorization code resulting in a service authorization code.

135 Claims, 42 Drawing figures



**WEST****End of Result Set**

Generate Collection

Print

L6: Entry 1 of 1

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## CLAIMS:

What is claimed is:

1. A proximity service unit for providing at least one predetermined service for use with multiple types of wireless devices, comprising: a multiple channel wireless transceiver capable of receiving at least two signal types, the multiple channel wireless transceiver receiving a request authorization code from each of a plurality of respective wireless devices such that the plurality of wireless devices communicate simultaneously with the multiple channel wireless transceiver without air time, each wireless device being capable of communicating the request authorization code when the wireless device is within a predetermined proximity distance from the multiple channel wireless transceiver and each request authorization code uniquely identifying the wireless device from which the request authorization code is received; a proximity unit validation assembly communicating with the multiple channel wireless transceiver receiving and validating the plurality of request authorization codes received by the multiple channel wireless transceiver and outputting a service authorization code in response to each of the request authorization codes upon validating the respective request authorization code; and a legacy activation unit receiving the service authorization codes and for providing at least one predetermined service for each wireless device providing the request authorization code resulting in a service authorization code.
2. The proximity service unit of claim 1, wherein the predetermined service provided by the legacy activation unit includes at least one of audio and visual communication services and wherein the legacy activation unit includes a multiple line bus communicating with a multiplexer unit and the multiple channel wireless transceiver so as to permit communication between the multiple channel wireless transceiver and the multiplexer unit, the multiplexer unit connected to a data connection for permitting simultaneous bidirectional communication between the multiple channel wireless transceiver and the data connection so as to provide the at least one of audio and visual communication services for the plurality of respective wireless devices providing the request authorization code resulting in the service authorization code.
3. The proximity service unit of claim 2, further comprising a plurality of multiple channel wireless transceivers with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.
4. The proximity service unit of claim 3, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

5. The proximity service unit of claim 2, further comprising a biometric unit receiving a biometric signal from an individual and outputting the biometric signal to the proximity unit validation assembly, the proximity unit validation assembly utilizing the biometric signal to validate the respective request authorization code.
6. The proximity service unit of claim 5, wherein the biometric unit includes an iris detection element for generating biometric signals indicative of the iris of the individual.
7. The proximity service unit of claim 5, wherein the biometric unit includes a fingerprint detector for generating biometric signals indicative of the fingerprint of the individual.
8. The proximity service unit of claim 5, wherein the biometric unit is provided on the proximity service unit.
9. The proximity service unit of claim 5, wherein the biometric unit is provided on respective ones of the wireless devices.
10. The proximity service unit of claim 2, further comprising a legacy payment interface unit and an interface control unit, the legacy payment interface unit receiving a signal indicative of a valid payment, and outputting a signal to the interface control unit, the interface control unit outputting a signal to the proximity unit validation assembly to output the service authorization code.
11. The proximity service unit of claim 10, wherein the legacy payment interface unit is a legacy coin payment interface unit determining whether the valid payment has been made by coin.
12. The proximity service unit of claim 10, wherein the legacy payment interface unit is a legacy credit card interface unit determining whether the valid payment has been made by credit card.
13. The proximity service unit of claim 2, wherein at least one additional predetermined service is provided.
14. The proximity service unit of claim 13, wherein the at least one additional predetermined service is selected from a group of services comprising automated teller services, garage door opener services, door lock services, vending machine services, television services, checkout services, live entertainment facilities services, and a mobile transportation service.
15. The proximity service unit of claim 13, wherein the multiple channel wireless transceiver is capable of receiving a second authorization code from the wireless devices for authorizing the additional predetermined service, the second authorization code uniquely identifying the respective wireless device from which the second authorization code was transmitted.
16. The proximity service unit of claim 15, wherein the multiple channel wireless transceiver detects the signal strength of the wireless device transmitting the second request authorization code and of the wireless device transmitting the request authorization code, and transmits the second request authorization code to the proximity unit validation assembly if the signal strength of the wireless device transmitting the second request authorization code exceeds a first signal strength, and transmits the request authorization code to the proximity unit validation assembly if the signal strength of the wireless device transmitting the request authorization code exceeds a second signal strength.
17. The proximity service unit of claim 16, wherein the multiple channel wireless transceiver detects the first signal strength in response to the wireless devices being within a first proximity distance from the multiple channel wireless transceiver, and the multiple channel wireless transceiver detects the second signal strength in response to the wireless devices being within a second proximity distance from the multiple channel wireless transceiver, and wherein the first proximity distance is greater than the second proximity distance.
18. The proximity service unit of claim 1, wherein the predetermined service is a vehicle toll service.
19. The proximity service unit of claim 18, further comprising a plurality of multiple

channel wireless transceiver with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.

20. The proximity service unit of claim 19, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

21. The proximity service unit of claim 18, wherein the multiple channel wireless transceiver detects a first signal strength from the wireless devices and a second signal strength from the wireless devices, and wherein the proximity unit validation assembly validates the plurality of request authorization codes in response to the multiple channel wireless transceiver detecting the first signal strength, and the proximity unit validation assembly outputs the service authorization codes in response to the multiple channel wireless transceiver detecting the second signal strength.

22. The proximity service unit of claim 21, wherein the multiple channel wireless transceiver detects the first signal strength in response to the wireless devices being within a first proximity distance from the multiple channel wireless transceiver, and the multiple channel wireless transceiver detects the second signal strength in response to the wireless devices being within a second proximity distance from the multiple channel wireless transceiver, and wherein the first proximity distance is greater than the second proximity distance.

23. The proximity service unit of claim 18, wherein the request authorization code includes at least one of a vehicle identification number, and a customer identification data.

24. The proximity service unit of claim 18, wherein the request authorization code is automatically transmitted to the multiple channel wireless transceiver by the wireless device.

25. The proximity service unit of claim 1, wherein the predetermined service is a transportation gate service.

26. The proximity service unit of claim 25, further comprising a plurality of multiple channel wireless transceivers with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.

27. The proximity service unit of claim 26, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

28. The proximity service unit of claim 25, wherein the multiple channel wireless transceiver detects a first signal strength from the wireless devices and a second signal strength from the wireless devices, and wherein the proximity unit validation assembly validates the plurality of request authorization codes in response to the multiple channel wireless transceiver detecting the first signal strength, and the proximity unit validation assembly outputs the service authorization codes in response to the multiple channel wireless transceiver detecting the second signal strength.

29. The proximity service unit of claim 28, wherein the multiple channel wireless transceiver detects the first signal strength in response to the wireless devices being within a first proximity distance from the multiple channel wireless transceiver, and the multiple channel wireless transceiver detects the second signal strength in response to the wireless devices being within a second proximity distance from the multiple channel wireless transceiver, and wherein the first proximity distance is greater than the second proximity distance.

30. The proximity service unit of claim 25, wherein the request authorization code includes at least one of a vehicle identification number, and a customer identification data.

31. The proximity service unit of claim 25, wherein the request authorization code is automatically transmitted to the multiple channel wireless transceiver by the wireless device.

32. The proximity service unit of claim 1, wherein the predetermined service is selected from a group of automated teller services.

33. The proximity service unit of claim 32, further comprising a plurality of multiple channel wireless transceivers with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.
34. The proximity service unit of claim 32, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.
35. The proximity service unit of claim 32, wherein the multiple channel wireless transceiver detects a first signal strength from the wireless devices and a second signal strength from the wireless devices, and wherein the proximity unit validation assembly validates the plurality of request authorization codes in response to the multiple channel wireless transceiver detecting the first signal strength, and the proximity unit validation assembly outputs the service authorization codes in response to the multiple channel wireless transceiver detecting the second signal strength.
36. The proximity service unit of claim 35, wherein the multiple channel wireless transceiver detects the first signal strength in response to the wireless devices being within a first proximity distance from the multiple channel wireless transceiver, and the multiple channel wireless transceiver detects the second signal strength in response to the wireless devices being within a second proximity distance from the multiple channel wireless transceiver, and wherein the first proximity distance is greater than the second proximity distance.
37. The proximity service unit of claim 1, wherein the predetermined service is a vehicle services, controlling at least a portion for a vehicle.
38. The proximity service unit of claim 37, further comprising a plurality of multiple channel wireless transceivers with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.
39. The proximity service unit of claim 38, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.
40. The proximity service unit of claim 37, wherein the request authorization code includes at least one of a vehicle identification number, and a customer identification data.
41. The proximity service unit of claim 37, further comprising an antitheft device deactuating the ignition of the vehicle in response to the multiple channel wireless transceiver receiving an antitheft code from a remote wireless transmitter.
42. The proximity service unit of claim 37, wherein the request authorization code is automatically transmitted to the multiple channel wireless transceiver by the wireless device.
43. The proximity service unit of claim 1, wherein the predetermined service is at least two services selected from a group of services comprising activating a garage door opener, activating a doorlock, activating a vending machine, and activating a television set.
44. The proximity service unit of claim 43, further comprising a plurality of multiple channel wireless transceivers with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.
45. The proximity service unit of claim 44, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.
46. The proximity service unit of claim 43, wherein the multiple channel wireless transceiver detects a first signal strength from the wireless devices and a second signal strength from the wireless devices, and wherein the proximity unit validation assembly validates the plurality of request authorization codes in response to the multiple channel wireless transceiver detecting the first signal strength, and the proximity unit validation assembly outputs the service authorization codes in response

to the multiple channel wireless transceiver detecting the second signal strength.

47. The proximity service unit of claim 46, wherein the multiple channel wireless transceiver detects the first signal strength in response to the wireless devices being within a first proximity distance from the multiple channel wireless transceiver, and the multiple channel wireless transceiver detects the second signal strength in response to the wireless devices being within a second proximity distance from the multiple channel wireless transceiver, and wherein the first proximity distance is greater than the second proximity distance.

48. The proximity service unit of claim 43, wherein the request authorization code includes a PIN number.

49. The proximity service unit of claim 43, wherein a list of authorized codes for validating the request authorization codes are stored in a remote database.

50. The proximity service unit of claim 49, wherein the remote database is maintained by an Internet service provider.

51. The proximity service unit of claim 1, wherein the predetermined service is at least two services selected from a group of services comprising activating a gate entry system, activating a POS system, activating a vending machine, and activating a kiosk machine.

52. The proximity service unit of claim 51, further comprising a plurality of multiple channel wireless transceivers with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.

53. The proximity service unit of claim 52, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

54. The proximity service unit of claim 51, wherein the multiple channel wireless transceiver detects a first signal strength from the wireless devices and a second signal strength from the wireless devices, and wherein the proximity unit validation assembly validates the plurality of request authorization codes in response to the multiple channel wireless transceiver detecting the first signal strength, and the proximity unit validation assembly outputs the service authorization codes in response to the multiple channel wireless transceiver detecting the second signal strength.

55. The proximity service unit of claim 54, wherein the multiple channel wireless transceiver detects the first signal strength in response to the wireless devices being within a first proximity distance from the multiple channel wireless transceiver, and the multiple channel wireless transceiver detects the second signal strength in response to the wireless devices being within a second proximity distance from the multiple channel wireless transceiver, and wherein the first proximity distance is greater than the second proximity distance.

56. The proximity service unit of claim 51, wherein the request authorization code includes a PIN number.

57. The proximity service unit of claim 51, wherein a list of authorized codes for validating the request authorization codes are stored in a remote database.

58. The proximity service unit of claim 57, wherein the remote database is maintained by an Internet service provider.

59. The proximity service unit of claim 1, wherein the predetermined service is a gasoline dispensing service.

60. The proximity service unit of claim 59, further comprising a plurality of multiple channel wireless transceivers with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.

61. The proximity service unit of claim 60, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

62. The proximity service unit of claim 59, wherein the request authorization code includes at least one of a credit data, and a customer identification data.
63. The proximity service unit of claim 1, wherein the predetermined service is a vending machine service for at least one of dispensing goods and providing predetermined services.
64. The proximity service unit of claim 63, further comprising a plurality of multiple channel wireless transceivers with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.
65. The proximity service unit of claim 64, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.
66. The proximity service unit of claim 63, wherein the request authorization code includes at least one of a credit data, and a customer identification data.
67. The proximity service unit of claim 63, wherein the proximity unit validation assembly includes a predetermined set of service provider identification codes stored therein for which the vending machine service was authorized, and wherein the request authorization code includes a service provider identification number and a customer code, the proximity unit validation assembly storing the customer code and utilizing the service provider identification number and the customer code in the request authorization code, and the predetermined set of service provider identification codes in validating the respective request authorization code.
68. The proximity service unit of claim 67, wherein the multiple channel wireless transceiver receives an authorization code that authorizes the collection of the customer codes from the proximity unit validation assembly.
69. The proximity service unit of claim 67, further comprising a high power transmitter uploading the customer code and the service provider identification number to a service provider for collection after the vending machine service has been provided.
70. The proximity service unit of claim 1, wherein the predetermined service is a checkout service for receiving a customer's payment for at least one of goods and services.
71. The proximity service unit of claim 70, further comprising a plurality of multiple channel wireless transceivers with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.
72. The proximity service unit of claim 71, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.
73. The proximity service unit of claim 70, wherein the request authorization code includes at least one of a credit data, and a customer identification data.
74. The proximity service unit of claim 70, wherein the multiple channel wireless transceiver receives a contest notification signal from at least one of the wireless devices so as to notify the proximity unit validation assembly that the wireless device is in a retail store in which the proximity service unit is disposed, the notification signal uniquely identifying the respective wireless device from which the contest notification signal was transmitted.
75. The proximity service unit of claim 74, wherein the proximity unit validation assembly receives the contest notification signal from the multiple channel wireless transceiver and enters the unique identification of the wireless device into a contest.
76. The proximity service unit of claim 74, wherein the multiple channel wireless transceiver includes a dual distance signaling feature so as to only detect the contest notification signal from the wireless devices within a first proximity distance from the proximity service unit and to only detect the request authorization code from the wireless devices within a second proximity distance from the proximity service unit and wherein the first proximity distance is greater than the second proximity distance.

77. The proximity service unit of claim 1, wherein the predetermined service is a mobile transportation service.

78. The proximity service unit of claim 77 further comprising a plurality of multiple channel wireless transceivers with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.

79. The proximity service unit of claim 78, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

80. The proximity service unit of claim 77, wherein the request authorization code includes at least one of a credit data, and a customer identification data.

81. The proximity service unit of claim 1, wherein the predetermined service is a parking meter service for charging for parking.

82. The proximity service unit of claim 81, further comprising a plurality of multiple channel wireless transceivers with at least two of the multiple channel wireless transceivers being adapted to receive different types of wireless signals from the multiple wireless devices.

83. The proximity service unit of claim 82, wherein the different types of wireless signals are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

84. The proximity service unit of claim 83, wherein the request authorization code includes at least one of a credit data, and a customer identification data.

85. The proximity service unit of claim 81, wherein the proximity unit validation assembly includes a predetermined set of service provider identification codes stored therein for which the parking meter service was authorized, and wherein the request authorization code includes a service provider identification number and a customer code, the proximity unit validation assembly storing the customer code and utilizing the service provider identification number and the customer code in the request authorization code, and the predetermined set of service provider identification codes in validating the respective request authorization code.

86. The proximity service unit of claim 85, wherein the multiple channel wireless transceiver receives a collection authorization code from a mobile interrogator that authorizes the collection of the customer codes from the proximity unit validation assembly to the mobile interrogator.

87. The proximity service unit of claim 86, wherein the multiple channel wireless transceiver includes a dual distance signaling feature so as to only detect the mobile interrogator within a first proximity distance from the proximity service unit and to only detect the wireless device within a second proximity distance from the proximity service unit and wherein the first proximity distance is greater than the second proximity distance.

88. The proximity service unit of claim 86, wherein the multiple channel wireless transceiver detects a first signal strength and transmits the collection authorization code to the proximity unit validation assembly in response to the mobile interrogator being within a first proximity distance from the multiple channel wireless transceiver, and the multiple channel wireless transceiver detects a second signal strength and transmits the request authorization code to the proximity unit validation assembly in response to the wireless device being within a second proximity distance from the multiple channel wireless transceiver, and wherein the first proximity distance is greater than the second proximity distance.

89. The proximity service unit of claim 85, further comprising a high power transmitter uploading the customer code and the service provider identification number to a service provider for collection after the parking meter service has been provided.

90. A proximity authorization unit for use with proximity service units, some of the proximity service units being capable of receiving information via a first signal and some of the proximity service units being capable of receiving information via a second signal, the second signal being different from the first signal, and each of the proximity service units providing a predetermined service when activated in response to

receiving a request authorization code, the proximity authorization unit comprising: a portable housing; a computer unit supported by the housing and having the request authorization code stored therein; and a communication unit supported by the housing, the computer unit retrieving the request authorization code and the communication unit outputting the request authorization code on the first signal for communication to the proximity service units capable of receiving the first signal, and the communication unit outputting the request authorization code via the second signal to the proximity service units capable of receiving the second signal.

91. The proximity authorization unit of claim 90, wherein the communication unit is a low power communication unit not two way connected to a wireless communication network controlled from a central control center.

92. The proximity authorization unit of claim 90, wherein the first and second signal are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

93. The proximity authorization unit of claim 90, wherein the request authorization code includes a customer identification code and a service provider identification number.

94. The proximity authorization unit of claim 90, further comprising means for communicating audio and video information in a format perceivable by an individual located adjacent to the portable housing.

95. The proximity authorization unit of claim 94, further comprising means for receiving at least one of audio and video information from the individual, the at least one of audio and video information being transmitted to the communication unit, and wherein the communication unit outputs the audio and video information on the first signal for communication to the proximity service units capable of receiving the first signal, and outputs the audio and video information on the second signal for communication to the proximity service units capable of receiving the second signal.

96. The proximity authorization unit of claim 94, wherein the first and second signal are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

97. The proximity authorization unit of claim 94, wherein the request authorization code includes a customer identification code and a service provider identification number such that the proximity service unit provides local authorization of the request authorization code.

98. The proximity authorization unit of claim 90, wherein the computer unit stores biometric data indicative of an individual authorized to use the proximity authorization unit and further comprising a biometric unit on the portable housing, the biometric unit receiving a biometric signal from an individual, and outputting the biometric signal to the computer unit such that the computer unit receives the biometric signal and compares the biometric signal with the biometric data for preventing unauthorized usage of the proximity authorization unit.

99. The proximity authorization unit of claim 98, wherein the biometric unit outputs the biometric signal to the communication unit, the communication unit outputting the biometric signal on the first signal for communication to the proximity service units capable of receiving the first signal, and the communication unit outputting the biometric signal via the second signal to the proximity service units capable of receiving the second signal.

100. The proximity authorization unit of claim 98, wherein the communication unit is a low power communication unit.

101. The proximity authorization unit of claim 98, wherein the first and second signal are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

102. The proximity authorization unit of claim 98, wherein the request authorization code includes a customer identification code and a service provider identification number.

103. The proximity authorization unit of claim 98, further comprising means for communicating audio and video information in a format perceivable by a user located adjacent to the portable housing.



104. The proximity authorization unit of claim 103, wherein the first and second signal are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

105. The proximity authorization unit of claim 103, wherein the request authorization code includes a customer identification code and a service provider identification number such that the proximity service unit provides local authorization of the request authorization code.

106. The proximity authorization unit of claim 90, wherein the communication unit is capable of receiving signals indicative of at least one of messages and data, and wherein the proximity authorization unit further comprises means for recording the messages and data and means for playing back the messages and data.

107. The proximity authorization unit of claim 106, wherein the communication unit is a low power communication unit not two way connected to a wireless communication network controlled from a central control center.

108. The proximity authorization unit of claim 106, wherein the first and second signal are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

109. The proximity authorization unit of claim 106, wherein the request authorization code includes a customer identification code and a service provider identification number.

110. The proximity authorization unit of claim 106, further comprising means for communicating audio and video information in a format perceivable by an individual located adjacent to the portable housing.

111. The proximity authorization unit of claim 110, further comprising means for receiving at least one of audio and video information from the individual, the at least one of audio and video information being transmitted to the communication unit, and wherein the communication unit outputs the audio and video information on the first signal for communication to the proximity service units capable of receiving the first signal, and outputs the audio and video information on the second signal for communication to the proximity service units capable of receiving the second signal.

112. The proximity authorization unit of claim 110, wherein the first and second signal are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

113. The proximity authorization unit of claim 110, wherein the request authorization code includes a customer identification code and a service provider identification number such that the proximity service unit provides local authorization of the request authorization code.

114. The proximity authorization unit of claim 106, wherein the computer unit stores biometric data indicative of an individual authorized to use the proximity authorization unit and further comprising a biometric unit on the portable housing, the biometric unit receiving a biometric signal from an individual, and outputting the biometric signal to the computer unit such that the computer unit receives the biometric signal and compares the biometric signal with the biometric data for preventing unauthorized usage of the proximity authorization unit.

115. The proximity authorization unit of claim 114, wherein the biometric unit outputs the biometric signal to the communication unit, the communication unit outputting the biometric signal on the first signal for communication to the proximity service units capable of receiving the first signal, and the communication unit outputting the biometric signal via the second signal to the proximity service units capable of receiving the second signal.

116. The proximity authorization unit of claim 114, wherein the communication unit is a low power communication unit not two way connected to a wireless communication network controlled from a central control center.

117. The proximity authorization unit of claim 114, wherein the first and second signal are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

118. The proximity authorization unit of claim 114, wherein the request authorization code includes a customer identification code and a service provider identification number.

119. The proximity authorization unit of claim 114, further comprising means for communicating audio and video information in a format perceivable by a user located adjacent to the portable housing.

120. The proximity authorization unit of claim 119, wherein the first and second signal are selected from a group comprising infrared region signals, 900 MHz region signals, 1.8 GHz region signals, and 2.4 GHz region signals.

121. The proximity authorization unit of claim 119, wherein the request authorization code includes a customer identification code and a service provider identification number such that the proximity service unit provides local authorization of the request authorization code.

122. The proximity authorization unit of claim 90, wherein the portable housing is configured to be worn by an individual.

123. The proximity authorization unit of claim 122, wherein the portable housing is in the form of a bracelet.

124. The proximity authorization unit of claim 123, further comprising a power reception unit electrically connected to the computer unit and the communication unit, the power reception unit receiving a power signal from at least one of the proximity service units, and in response to receiving the power signal, the power reception unit providing a source of power to the computer unit and the communication unit for a period of time sufficient for the computer unit to retrieve the request authorization code and the communication unit to output the request authorization code on the first signal, and to output the request authorization code on the second signal.

125. The proximity authorization unit of claim 122, further comprising at least one light source positioned on the portable housing, and a light control assembly electrically connected to the light source for selectively actuating and deactuating the light source.

126. The proximity authorization unit of claim 122, further comprising a power reception unit electrically connected to the computer unit and the communication unit, the power reception unit receiving a power signal from at least one of the proximity service units, and in response to receiving the power signal, the power reception unit providing a source of power to the computer unit and the communication unit for a period of time sufficient for the computer unit to retrieve the request authorization code and the communication unit to output the request authorization code on the first signal, and to output the request authorization code on the second signal.

127. The proximity authorization unit of claim 126, wherein the power reception unit is electrically connected to the light control assembly, and wherein upon reception of the power signal by the power reception unit, the power reception unit outputs a signal to the light control assembly to cause the light control assembly to actuate the light source.

128. The proximity authorization unit of claim 126, wherein the communication unit receives a service authorization code from at least one of the proximity service units, the service authorization code indicating that the request authorization code has been validated, and wherein the light control assembly receives a signal from the communication unit in response to the communication unit receiving the service authorization code so as to cause the light control assembly to actuate the light source to indicate to the individual that the request authorization code has been validated.

129. A proximity authorization transaction system, comprising: a plurality of wireless devices with at least two of the wireless devices being of a different type, at least some of the wireless devices outputting a request authorization code; a plurality of proximity service units with each of the proximity service units capable of providing a predetermined service, at least two of the proximity service units providing different predetermined services and the at least two of the proximity service units comprising: a multiple channel wireless transceiver capable of receiving at least two signal types, the multiple channel wireless transceiver receiving the request authorization code from some of the plurality of wireless devices such that the plurality of wireless devices

are capable of communicating simultaneously with the multiple channel wireless transceiver without air time, each wireless device being capable of communicating the request authorization code when the wireless device is within a predetermined proximity distance from the multiple channel wireless transceiver and each request authorization code uniquely identifying the wireless device from which the request authorization code is received; a proximity unit validation assembly communicating with the multiple channel wireless transceiver receiving and validating the plurality of request authorization codes received by the multiple channel wireless transceiver and outputting a service authorization code in response to each of the request authorization codes upon validating the respective request authorization code; and legacy activation unit and for providing at least one predetermined service for each wireless device providing the request authorization code resulting in a service authorization code.

130. The proximity authorization transaction system of claim 129, wherein some of the proximity service units are capable of receiving information via a first signal and some of the proximity service units are capable of receiving information via a second signal, the second signal being different from the first signal, and wherein at least one of the wireless devices comprises: a portable housing; a computer unit supported by the housing and having the request authorization code stored therein; and a communication unit supported by the housing, the computer unit retrieving the request authorization code and the communication unit outputting the request authorization code on the first signal for communication to the proximity service units capable of receiving the first signal, and the computer unit retrieving the request authorization code and the communication unit outputting the request authorization code via the second signal to the proximity service units capable of receiving the second signal.

131. A proximity service unit for providing at least one predetermined service for use with multiple types of wireless devices, comprising: a wireless transceiver capable of receiving at least two signal types, the wireless transceiver receiving a request authorization code from each of a plurality of respective wireless devices such that the plurality of wireless devices communicate simultaneously with the wireless transceiver without air time, each wireless device being capable of communicating the request authorization code when the wireless device is within a predetermined proximity distance from the wireless transceiver and each request authorization code uniquely identifying the wireless device from which the request authorization code is received; a proximity unit validation assembly communicating with the wireless transceiver receiving and validating the plurality of request authorization codes received by the wireless transceiver and outputting a service authorization code in response to each of the request authorization codes upon validating the respective request authorization code; a legacy activation unit and for providing at least one predetermined service for each wireless device providing the request authorization code resulting in a service authorization code; an interface control unit; and a legacy payment interface unit, the legacy payment interface unit receiving a signal indicative of a valid payment, and outputting a signal to the interface control unit, the interface control unit outputting a signal to the proximity unit validation assembly to output the service authorization code.

132. The proximity service unit of claim 131, wherein the proximity unit validation assembly outputs the request authorization code to a third party for validation, and outputs the service authorization code in response to receiving a validation signal from the third party.

133. A method for activating a proximity service unit capable of providing a predetermined service, comprising: providing a plurality of wireless devices with at least two of the wireless devices being of a different type, each of the wireless devices storing a request authorization code uniquely identifying the wireless device; providing a plurality of proximity service units with each of the proximity service units capable of providing a predetermined service, at least two of the proximity service units providing different predetermined services; outputting a request authorization code by at least some of the wireless devices; receiving, by the proximity service units, the request authorization code from the wireless devices outputting the request authorization code such that the plurality of wireless devices communicate simultaneously with the proximity service unit without air time; validating by the proximity service units receiving the request authorization code to generate a service authorization code; and outputting the service authorization code for each request authorization code which is validated.

134. A proximity authorization transaction system, comprising: a wireless device having a request authorization code stored therein, the wireless device being capable of communicating via a wireless link and a physical link, the wireless device outputting

the request authorization code by at least one of the wireless link and the physical link; and a proximity service unit having a physical adapter element receiving at least a portion of the wireless device to establish the physical link, the proximity service unit capable of providing a predetermined service upon validation of the request authorization code, the proximity service unit capable of communicating with the wireless device via the wireless link and the physical link, and receiving the request authorization code by at least one of the wireless link and the physical link, and the proximity service unit and the wireless device establishing communication by both the wireless link and the physical link as a condition of the validation of the request authorization code.

135. A method for providing a predetermined service, comprising: providing a wireless device having a request authorization code stored therein, the wireless device capable of communicating via a wireless link and a physical link; providing a proximity service unit capable of providing a predetermined service upon validation of the request authorization code, the proximity service unit capable of communicating with the wireless device via the wireless link and the physical link, the proximity service unit having a physical adapter element receiving at least a portion of the wireless device to establish the physical link; outputting, by the wireless device, the request authorization code by at least one of the wireless link and the physical link, receiving, by the proximity service unit, the request authorization code by at least one of the wireless link and the physical link; and establishing communication between the proximity service unit and the wireless device by the physical link when the request authorization code is output by the wireless link, and establishing communication by the wireless link when the request authorization code is output by the physical link; and thereafter validating the request authorization code by the proximity service unit.